

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number  
**WO 2004/031768 A2**

- (51) International Patent Classification<sup>7</sup>: G01N 33/50, C07K 14/47
- (74) Agents: PEAUCELLE, Chantal et al.; Cabinet Armengaud Aïne, 3, Avenue Bugeaud, F-75116 Paris (FR).
- (21) International Application Number: PCT/EP2003/012056
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 2 October 2003 (02.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/415,092 2 October 2002 (02.10.2002) US  
60/472,725 23 May 2003 (23.05.2003) US
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): THER-APTOSIS S.A. [FR/FR]; Pasteur Biotop, 25, rue du Dr. Roux, F-75015 Paris (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): JACOTOT, Etienne [FR/FR]; 171, rue Lecourbe, F-75015 Paris (FR). LECOEUR, Hervé [FR/FR]; 113, rue Didot, F-75014 Paris (FR). REBOUILLAT, Dominique [FR/FR]; 36, rue du Hameau, F-75015 Paris (FR).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR SCREENING MODULATORS OF MITOCHONDRIAL FUNCTIONING AND NEW MODULATORS OBTAINED

(57) Abstract: The invention relates to a method for screening modulators of mitochondrial function comprising adding a compound to be tested in a purified, isolated mitochondria preparation and simultaneously using fluorimetric analysis of mitochondrial morphology, and especially real-time fluorimetric analysis, combining analysis of morphometric parameters (SSC/FSC parameters) with analysis of membrane integrity by dye fluorescence. Application to the obtention of peptides which induce mitochondrial membrane permeabilization.



WO 2004/031768 A2